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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,332	11/04/2003	Ghasi R. Agrawal	03-1343	5874

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LSI CORPORATION
1621 BARBER LANE
MS: D-106
MILPITAS, CA 95035

EXAMINER	
NGUYEN, STEVE N	
ART UNIT	**PAPER NUMBER**
2117	

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10/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/701,332	AGRAWAL ET AL.	
	Examiner	Art Unit	
	Steve Nguyen	2117	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 15-26 are currently pending.

Response to Arguments

2. Applicant's arguments filed 8/14/2007 have been fully considered but they are not persuasive.

The Applicant argues that Tanishima does not teach testing adding access to additional redundant memory cell arrays after the functional memory is already repaired and re-tested.

The Examiner notes that McClure teaches testing the functional memory (col. 4, lines 14-17), repairing the memory (col. 4, lines 17-18), and re-testing the memory (col. 8, lines 3-7).

Tanishima teaches adding access to additional redundant memory not required for the repair (col. 6, lines 30-44) and testing the additional redundant memory (col. 7, line 66 to col. 8, line 8).

In view of KSR Int'l Co. v. Teleflex Inc., 2007 U.S. LEXIS 4745, (U.S. 2007), the Supreme Court has held that "a patent for a combination which only unites old elements with no change in their respective functions...obviously withdraws what is already known into the field of its monopoly and diminishes resources available to skillful men...The combination of familiar elements

according to known methods is likely to be obvious when it does no more than yield predictable results."

In this case, all of the claimed elements are known in McClure and Tanishima. The only difference is that the method of Tanishima is not performed after that of McClure. However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to perform the method of Tanishima after the steps of McClure as claimed because the steps of Tanishima could have been used in combination with the test method of McClure to achieve predictable results wherein each step in the references would have performed the same function as it did separately.

The Examiner disagrees with the Applicant and maintains all rejections of claims 15-26. All amendments and arguments by the Applicant have been considered. It is the Examiner's conclusion that claims 15-26 are not patentably distinct or non-obvious over the prior art of record. Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 15-26 rejected under 35 U.S.C. 103(a) as being unpatentable over McClure (US Pat. 5,841,709) in view of Tanishima et al (US Pat. 6,999,357; hereinafter referred to as Tanishima).

As per claims 15 and 21:

McClure teaches a method for testing memory, said method comprising:

- testing functional memory (col. 4, lines 14-17);
- repairing the functional memory by adding access to redundant elements (col. 4, lines 17-18);
- re-testing the functional memory which has been repaired (col. 8, lines 3-7);

Not explicitly disclosed by McClure is adding access to additional redundant memory which is not required for the repair after the repairing and re-testing; and after repairing and re-testing the functional memory and adding access to the additional redundant memory which has been added which was not required for the repair, testing the additional redundant memory which has been added which was not required for the repair.

However, Tanishima in an analogous art teaches adding access to additional redundant memory not required for the repair (col. 6, lines 30-44) and testing the additional redundant memory (col. 7, line 66 to col. 8, line 8). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the method of Tanishima to access and test the unused redundant memory of McClure. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that Tanishima provides a simple circuit configuration for performing tests of all the redundant memory cells without writing to the redundant replacement array (col. 2, lines 25-30) and would have enabled the additional redundant memory to be tested (col. 6, lines 43-44).

As per claims 16 and 22:

McClure further teaches using repair information to repair the memory (col. 6, lines 8-20; a redundant column select signal is repair information).

As per claims 17-20 and 23-26:

Tanishima teaches forcing usage of redundant elements which are not needed to be used for repairing the memory; and faking defects to remap good elements with redundant elements (col. 6, lines 30-44 and col. 7, line 66 to col. 8, line 8).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Nguyen whose telephone number is (571) 272-7214. The examiner can normally be reached on M-F, 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steve Nguyen
Examiner
Art Unit 2117

GUY LAMARRE
PRIMARY EXAMINER